RFID Technology for Smart Vehicle Control using Traffic Signal & Speed Limit Tag Communication

Abstract

Traffic violations are a major problem. Monitoring these traffic violations by human intervention over a wider area is too complicated due to the increasing population. The main motive behind this paper is to reduce these reckless accidents for which we propose a system that governs and controls the speed of the vehicle without any direct inconvenience to the driver. There are instances where the speed of the automobile is beyond the expected speed limit or the driver does not obey the traffic signals. An RFID reader present in the vehicle senses the RFID tag linked with a red traffic light or senses the vehicle speed limit on the tag attached to the speed limit signboard. The Electronic Control Unit (ECU) present in the vehicle will then decide upon the required control measure by comparing the tag information with real time speed of the automobile. Finally the proposed speed control simulation techniques and electro-hydraulic braking system is explained in detail.

References

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Index Terms

Computer Science
Control Systems

Keywords

Rfid (radio Frequency Identification) Technology
Ecu (electronic Control Unit)
Electro-hydraulic Braking
Electrical Fuel Pump And Injector